

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-17 (Canceled).

18. (Currently amended) A method for producing a carrier for the determination of analytes, comprising:

- (a) providing a microfluidic carrier,
- (b) passing liquid with biopolymer receptor building blocks for synthesizing biopolymeric receptors over predetermined zones on the carrier,
- (c) immobilizing the biopolymer receptor building blocks in said predetermined zones on the carrier and
- (d) repeating steps (b) and (c) until the desired biopolymeric receptors have been synthesized in-situ in the predetermined zones on the carrier using the immobilized biopolymer receptor building blocks from step (c),

wherein hapten groups are applied to the carrier before, during or/and after the synthesis of the biopolymeric receptors.

19. (Currently amended) The method according to claim 18, wherein said biopolymer receptor building blocks are immobilized using site and/or time specific immobilization.

20. (Withdrawn/Currently amended) A method for the quality control of

biopolymer receptor syntheses on a carrier, comprising;

- (a) providing a carrier,
- (b) applying hapten groups to the complete surface of the carrier or a part thereof which comprises zones for biopolymer receptor synthesis and adjacent zones on which no receptor synthesis is to take place,
- (c) carrying out a biopolymer receptor synthesis on the carrier,
- (d) contacting the carrier with a hapten detection reagent which permits detection of hapten groups,
- (e) evaluating the hapten group detection on the carrier and
- (f) correlating the result of the evaluation with the quality or/and efficiency of the biopolymer receptor synthesis.

21. (Withdrawn/Currently amended) A method for the quality control of

biopolymer receptor syntheses, comprising:

- (a) providing a carrier,
- (b) carrying out a biopolymer receptor synthesis on the carrier, wherein hapten groups are incorporated during the synthesis into the biopolymer receptor molecules at predetermined positions,
- (c) contacting the carrier with a hapten detection reagent which permits

detection of hapten groups,

- (d) evaluating the hapten group detection on the carrier and
- (e) correlating the results of the evaluation with the quality or/and efficiency of the biopolymer receptor synthesis.

- 22. (Previously presented) The method according to claim 18, wherein said carrier is a microfluidic carrier with channels and said predetermined zones are in said channels.
- 23. (Previously presented) The method according to claim 22, wherein said channels are closed channels.
- 24. (Canceled)
- 25. (Currently amended) The method according to claim ~~24~~18, wherein said biopolymers are selected from the group consisting of nucleic acids, nucleic acid analogs, proteins, peptides and carbohydrates.
- 26. (Currently amended) The method according to claim 18, wherein the biopolymeric receptors are selected from the group consisting of nucleic acids and nucleic acid analogs.
- 27. (Currently amended) The method according to claim 18, wherein a carrier is produced with a plurality of different biopolymer receptor zones.
- 28. (Currently amended) The method according to claim 27, wherein the carrier has at least 50 different biopolymer receptor zones.
- 29. (Currently amended) The method according to claim 27, wherein the carrier has at least 100 different biopolymer receptor zones.

30. (Previously presented) The method according to claim 18, wherein the hapten groups are organic molecules having a molecular weight of up to 2,000, which are recognized by a high affinity specific binding partner.
31. (Previously presented) The method according to claim 30, wherein the hapten groups are selected from digoxin, digoxigenin, dinitrophenol, biotin and biotin analogs.
32. (Currently amended) The method according to claim 18, wherein the hapten groups are applied to the complete surface of the carrier or a part thereof which comprises zones for biopolymer receptor synthesis and adjacent zones on which no receptor synthesis is to take place.
33. (Currently amended) The method according to claim 18, wherein the hapten groups are applied selectively onto respective single zones or groups of zones for the biopolymer receptor synthesis.
34. (Previously presented) The method according to claim 18, wherein the hapten groups are applied directly to the surface of the carrier.
35. (Currently amended) The method according to claim 18, wherein the hapten groups are inserted into spacer molecules which are disposed between the carrier surface and the biopolymer receptors.
36. (Currently amended) The method according to claim 18, wherein the hapten groups are inserted at one or more positions into the biopolymer receptors synthesized on the carrier.

37. (Previously presented) The method according to claim 18, wherein the hapten groups are applied reversibly.
38. (Previously presented) The method according to claim 18, wherein the hapten groups are applied irreversibly.